



PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE.
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TRANSMITTAL LETTER TO THE UNITED STATES	ATTORNEY'S DOCKET NUMBER		
DESIGNATED/ELECTED OFFICE (DO/EO/US)	019028-56312 U.S. APPLICATION NO. (If known, see 37 CFR 1.5)		
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371	10/521,920		
INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/US2003/023869 30 July 2003 (30.07.2003)	PRIORITY DATE CLAIMED		
PCT/US2003/023869 30 July 2003 (30.07.2003) TITLE OF INVENTION METHODS FOR PERFUSION AND PLATING OF P.	30 July 2002 (30.07.2002) RIMARY HEPATOCYTES AND A		
MEDIUM THEREFORE	UDIOLOGY, LEAGUELL R		
APPLICANT(S) FOR DO/EO/US MASSACHUSETTS INSTITUTE OF TEC TANNENBAUM, Steven R	<u> </u>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EC	D/US) the following items and other information:		
1 This is a FIRST submission of items concerning a submission under 35 U.S.C. 37	1.		
2. This is a SECOND or SUBSEQUENT submission of items concerning a submission	on under 35 U.S.C. 371.		
3. This is an express request to begin national examination procedures (35 U.S.C. 37 (5), (6), (9) and (21) indicated below.	(1(f)). The submission must include items		
4. The US has been elected (Article 31).			
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2))			
a. is attached hereto (required only if not communicated by the Internation	nal Bureau).		
b. has been communicated by the International Bureau.			
c. is not required, as the application was filed in the United States Receiv	ing Office (RO/US).		
6. An English language translation of the International Application as filed (35 U.S.C	An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).		
a. is attached hereto.			
b. has been previously submitted under 35 U.S.C. 154(d)(4).	b. has been previously submitted under 35 U.S.C. 154(d)(4).		
7. Amendments to the claims of the International Application under PCT Article 19	Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))		
a. are attached hereto (required only if not communicated by the Interna	a. are attached hereto (required only if not communicated by the International Bureau).		
b. Ave been communicated by the International Bureau.	b. Have been communicated by the International Bureau.		
<ul> <li>c.  have not been made; however, the time limit for making such amendad.</li> <li>d.  have not been made and will not be made.</li> </ul>			
An English language translation of the amendments to the claims under PCT Art	ticle 19 (35 U.S.C. 371(c)(3)).		
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).			
An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).			
Items 11 to 20 below concern document(s) or information included:			
11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.			
12. An assignment document for recording. A separate cover sheet in compliance wi	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.		
13. A preliminary amendment.	A preliminary amendment.		
14. An Application Data Sheet under 37 CFR 1.76.	An Application Data Sheet under 37 CFR 1.76.		
15. A substitute specification.			
16. A power of attorney and/or change of address letter.			
17. A computer-readable form of the sequence listing in accordance with PCT Rule 1	3ter.2 and 37 CFR 1.821- 1.825.		
18. A second copy of the published International Application under 35 U.S.C. 154(d)(	4).		
19. A second copy of the English language translation of the international application	under 35 U.S.C. 154(d)(4).		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER				
10/521,920 PCT/US2003/023869		019028-56312				
20. Other items or information: Certification of Facsimile; COPY-Notification to Comply with Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosure; Letter Regarding Sequence Listing Requirements in Response to Notification to Comply with Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosure.						
The fol	lowing fees have t	pean submitted			CALCULATIONS	PTO USE ONLY
				\$300	\$	
22. 🔲 Exar	nination fee (37 C	FR 1.492(c))				
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0 All other situations\$200			\$			
23. Search fee (37 CFR 1.492(b))  If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0  Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority			\$	þ.		
	TOTAL OF 21, 22	2 and 23 ≈			0.00	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).  The fee is \$250 for each additional 50 sheets of paper or fraction thereof.						
Total Sheets	Extra Sheets	Number of each additional 50 or fraction RATE thereof (round up to a whole number)				
- 100 =	/50 =			x \$250	\$ 0.00	)
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).		\$ 0.00				
CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$	
Total claims		- 20 =		× \$ 50	\$	<u> </u>
Independent clair	ms .	-3=	····	× \$200	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360			\$			
				CALCULATIONS =	\$ 0.00	2
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.		0.00	1			
SUBTOTAL =		\$ 0.00	<u>)                                    </u>			
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		\$	0.00			
TOTAL NATIONAL FEE =		\$	0.00			
			1.21(h)). The assignment mu 440.00 per property	st be accompanied +	\$	0.00
TOTAL FEES ENCLOSED =		\$	0.00			
					Amount to be refunded:	\$
					Amount to be charged	\$

FORM PTO-1390 (REV. 07-2005)



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_	A check in the amount of \$ to cover the above	a face is anchead	
b.	Please charge my Deposit Account No in the amount of \$ A duplicate copy of this sheet is enclosed.	to cover the above fees.	
c. 🛚	c. X  The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No A duplicate copy of this sheet is enclosed.		
d. 🗀	d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.		
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.			
Rona Nixo 100 S	ALL CORRESPONDENCE TO:  Id I. Eisenstein  n Peabody LLP  Gummer Street  on, MA 02110	SIGNATURE  Ronald I. Eisenstein/Nicole L.M. Valtz NAME  30,628/47,150  REGISTRATION NUMBER	

PAGE 5/9 \* RCVD AT 1/31/2006 2:48:06 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-6/25 \* DNIS:2739886 \* CSID:20060131144114000058 \* DURATION (mm-ss):05-02







## JNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Adres: COMMISSIONER FOR PATENTS P.O. 60x 1430 Abanatis, Vigitis 12313-1430

**371 FORMALITIES LETTER** 

\*OC000000016641004\*

		A m straiter Bro			
U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATT	ATTY, DOCKET NO.		
10/521,920	John K Leach	01	9028-56312		
	RECEIVED	INTERNATIONAL AF	PLICATION NO.		
	RECEIVED	PCT/US03	/23869		
53143	AUG 0 1 2005	LA. FILING DATE	PRIORITY DATE		
RONALD I. EISENSTEIN NIXON PEABODY LLP	AUG U 1 2003	07/30/2003	07/30/2002		
100 SUMMER STREET BOSTON, MA 02110	NIXON PEABODY LLP	CONFIRM	ATION NO. 617		

Date Mailed: 07/28/2005

## NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given TWO MONTHS FROM THE DATE OF THIS NOTICE within which to file the Items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CFR 1.821(c) Applicant must provide an initial paper or compact disc copy of the "Sequence Listing", as well as an amendment directing its entry into the application and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov



nnt is reminded that any communications to the United States Patent and Trademark Office must be mailed address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

BARBARA A CAMPBELL

Telephone: (703) 308-9140 EXT 217

## PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY, DOCKET NO.			
10/521,920	PCT/US03/23869	019028-56312			

FORM PCT/DO/EO/922 (371 Formalities Notice)